IN THE CLAIMS:

Claims 1-12 (cancelled)

13. (new) A method of processing multicomponent of composite and combined materials, the method comprising the steps of:

mixing waste materials from electronic and electric devices and equipments, by using separated components, under the action of a moving bed of solid particles of a substance, yielding a mixture;

performing whirling movement, characterized in that the treated materials are pretreated by removing contaminating components containing toxic heavy metals and polychlorinated biphenyls by grinding the waste to particles having the size of 5 to 25 mm; and

subjecting the mixture in an inert environment at a temperature of 350 °C to 600 °C and at a pressure of 100 kPa to 10 MPa, to the action of blades of a rotational mechanism for 10 seconds to 10 minutes,

wherein in the mixture occurs depolymerization, cracking and state transformation of macromolecular, solid and liquid organic fractions and their separation from the composite material in the form of organic vapors and gases, and disintegration of inorganic non-metallic fractions to small particles and increase of metal concentration in inorganic phase.

14. (new) The method according to claim 1, characterized in that after removing the contaminating components containing toxic heavy metals and polychlorinated biphenyls and before the treatment in inert environment by the action of blades of a rotational mechanism iron parts are removed in a magnetic separator.

15. (new) The method according to claim 1, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in the presence of lead and/or tin and/or zinc and/or mercury, added to the treatment process in an amount of 2 to 50 % by weight.

16. (new) The method according to claim 1, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in a reducing environment.

17. (new) The method according to claim 1, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

18. (new) The method according to claim 2, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

19. (new) The method according to claim 3, characterized in that the treated materials are subjected to the action of blades of a rotational mechanism in an alkaline environment.

20. (new) The method according to claim 1, characterized in that the inert environment is formed by nitrogen and/or carbon dioxide and/or water vapor and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which are inert or act as inert under the above conditions.

21. (new) The method according to claim 1, characterized in that the reducing environment is formed by hydrogen and/or hydrogen releasing substances and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which act as reducing.

22. (new) The method according to claim 2, characterized in that the reducing environment is formed by hydrogen and/or hydrogen releasing substances and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which act as reducing.

23. (new) The method according to claim 3, characterized in that the reducing environment is formed by hydrogen and/or hydrogen releasing substances and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which act as reducing.

24. (new) The method according to claim 4, characterized in that the reducing environment is formed by hydrogen and/or hydrogen releasing substances and/or gaseous products of depolymerization, cracking and state transformation of the macromolecular, solid and liquid organic fractions, which act as reducing.

25. (new) The method according to claim 1, characterized in that the alkaline environment is formed by solid particles of a substance, performing whirling movement and acting as alkaline, which substance is a solid alkaline absorbent, like calcium oxide and/or calcium carbonate and/or calcium hydroxide and/or sodium hydroxide and/or potassium hydroxide.

26. (new) The method according to claim 2, characterized in that the alkaline environment is formed by solid particles of a substance, performing whirling movement and acting as alkaline, which substance is a solid alkaline absorbent, like calcium oxide and/or calcium carbonate and/or calcium hydroxide and/or sodium hydroxide and/or potassium hydroxide.

27. (new) The method according to claim 3, characterized in that the alkaline environment is formed by solid particles of a substance, performing whirling movement and acting as alkaline, which substance is a solid alkaline absorbent, like calcium oxide and/or calcium carbonate and/or calcium hydroxide and/or sodium hydroxide and/or potassium hydroxide.

28. (new) The method according to claim 5, characterized in that the alkaline environment is formed by solid particles of a substance, performing whirling movement and acting as alkaline, which substance is a solid alkaline absorbent, like calcium oxide and/or calcium carbonate and/or calcium hydroxide and/or sodium hydroxide and/or potassium hydroxide.

29. (new) The method according to claim 1, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which acts under the reaction conditions catalytically on the running chemical reactions or it is a substance which is inert under the reaction conditions to the present reacting substances, such as granular quartz and/or silica sand and/or aluminosilicates and/or other

natural and/or-synthetic-minerals, containing silicon and/or aluminium and/or calcium and/or sodiumand/or potassium and/or oxygen and/or sulfur.

30. (new) The method according to claim 2, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which acts under the reaction conditions catalytically on the running chemical reactions or it is a substance which is inert under the reaction conditions to the present reacting substances, such as granular quartz and/or silica sand and/or aluminosilicates and/or other natural and/or-synthetic-minerals, containing silicon and/or aluminium and/or calcium and/or sodiumand/or potassium and/or oxygen and/or sulfur.

31. (new) The method according to claim 1, characterized in that the solid particles of a substance, performing whirling movement, are formed partially or fully of a substance which results from disintegration of inorganic non-metallic fractions to the multicomponent, composite and combined materials to small particles and metal particles.

32. (new) Utilization of separated organic, gaseous and liquid fractions according to claim 1 for production of alternative fuel and of the inorganic components as metal concentrate for metallurgical treatment.